

Amendments to the Specification:

Replace paragraph [0001] with the following amended paragraph:

[0001] This application is a division of U.S. Patent Application No. 10/223,075, filed August 15, 2002, now U.S. Patent No. 6,618,645, which is a division of U.S. Patent Application No. 09/920,353, filed August 1, 2001, now U.S. Patent No. 6,438,460, which is a division of U.S. Patent Application No. 09/312,343, filed May 14, 1999, now U.S. Patent No. 6,275,748, which is a continuation-in-part of U.S. Patent Application No. 09/204,747, filed December 2, 1998, now U.S. Patent No. 6,256,555.

Replace paragraph [0047] with the following amended paragraph:

[0047] Proximal rest pads 26 are arranged relative to distal rest pads 24 so that plane 36 of wafer 12 is preferably parallel to end effector 10 when gripped. This arrangement is readily achieved when the flat embodiment of proximal and distal rest pads 24 and 26 is employed. However, when the inclined embodiment is employed, proximal and distal rest pads 24 and 26 are arranged such that the points where wafer 12 contacts pad portions 42 are substantially equidistant from a center 70 of wafer 12 when active contact point 50 is extended and wafer 12 is gripped. For example, when wafer 12 is in the position shown in Fig. 1, the pad portions of distal and proximal rest pads 24 and 26 contact wafer 12 at points tangent to periphery 18 such that a line through the center of each pad portion 42 intersects center 70 of wafer 12. Wafer 12 is, therefore, laterally centered when its peripheral edge is gripped.

Replace paragraph [0075] with the following amended paragraph:

[0075] In the second embodiment, active contact point 150 is urged against wafer 12 with a force determined solely by spring 155. Spring 155 is supported between recesses 166 in piston 152 and end cap 159. The vacuum pressure source is routed to vacuum channel 164 through rotary vacuum communication seals or spools in robot arm 16. Thus, in the absence event of loss of vacuum pressure or other facilities, end effector 110 operates in a failsafe manner with spring 155 applying a biasing force that causes active contact point actuating mechanism 151 to attain its wafer-securing position to hold wafer 12 in its gripped position.